DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010801 Address: 333 Burma Road **Date Inspected:** 17-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang, Liu Xiao Zhong No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG/ TOWER**

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance Inspector (QA) Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

HEAVY DOCK

This QA Inspector randomly observed the following work in progress.

SOUTH TOWER LIFT #1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 057244 performing Flux Cored Arc Welding process for the weld SSD1-SA17-F/G-14 located on PCMK the skin C of south tower lift 1. ZPMC QC Mr. Qin Wen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054069 performing Flux Cored Arc Welding process for the weld SSD1-SA17-F/G-16 located on PCMK the skin C of south tower lift 1. ZPMC QC Mr. Qin Wen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050041 performing Flux Cored Arc

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Welding process for the weld SSD1-SA17-F/G-22 located on PCMK the skin C of south tower lift 1. ZPMC QC Mr. Qin Wen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052075 performing Flux Cored Arc Welding process for the weld SSD1-SA17-F/G-24 located on PCMK the skin C of south tower lift 1. ZPMC QC Mr. Qin Wen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

NORTH TOWER LIFT # 1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201825 performing Flux Cored Arc Welding process for the weld NSD1-A112-B/H-126 located on PCMK the weld between skin E stiffener and base plate of North tower lift 1. ZPMC QC Mr. Qin Wen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P5-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053116 performing Flux Cored Arc Welding process for the weld NSD1-A112-B/H-93 located on PCMK the weld between skin C stiffener and base plate of North tower lift 1. ZPMC QC Mr. Qin Wen monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2332-TC-P5-F.

EAST TOWER LIFT # 1

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 049541 performing Flux Cored Arc Welding process for the weld ESD1-SA294-F/G-24 located on PCMK The weld between P588 and P1144 on the skin C. ZPMC QC Mr. Liu Xiao Zhong monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040704 performing Flux Cored Arc Welding process for the weld ESD1-SA294-F/G-26 located on PCMK the weld between P588 and P1144 on the skin C. ZPMC QC Mr. Liu Xiao Zhong monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-2333-TC-P4-F.

TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

OBG SEGMENT 5 EAST

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 054467 performing Shielded Metal Arc Welding process for the weld SEG026C-011 located on PCMK bike path side longitudinal diaphragm between PP35 and PP36. ZPMC QC Mr. Wang Li Yang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 048659 performing Shielded Metal Arc Welding process for the weld SP602-001-62 located on PCMK T stiffener to side plate (SP602). ZPMC QC Mr. Zhang Qiang monitoring this welding. The welding variables recorded by QC appeared to comply with the

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

WPS-B-P-2114-FCM-1.

BLAST SHOP #1

VISUAL INSPECTON

OBG SEGMENT 8 AE

This Quality Assurance (QA) inspector performed random visual inspection after blasting along with Caltrans Quality Assurance (QA) Inspector Mr. Paul Dawson on inside upper panel, floor beam and inside corner assembly of OBG segment 8AE in between PP61 and PP62. During the inspection we found normal minor gouges, arc strikes, spatter, undercut. See attached photos for additional information.

Unless otherwise noted, all work observed on this dated appeared to generally comply with applicable contract documents.





Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Dawson,Paul	QA Reviewer